

## New Blood Program For Carbiders Is Set As Employees Will Replace Thru Red Cross

**Free Blood Replacement Will Be Offered To All Patients In Oak Ridge, Effective 1st Of April**

Arrangements have been made with the Oak Ridge Hospital and the Oak Ridge Chapter of the Red Cross to provide free blood for Carbide employees and their dependents who are hospitalized in the Oak Ridge Hospital. This service is available to all Carbide employees and their dependents regardless of where they live, whether in Oak Ridge or out of Oak Ridge.

When blood is needed in the Oak Ridge Hospital, the Oak Ridge Chapter of the American Red Cross should be contacted and given the patient's name, the employee's name and badge number, and the quantity of blood needed or used. The Red Cross will make the necessary arrangement with the hospital to have

the blood replaced by regular Red Cross blood donors without charge.

In order to extend this service to all Carbide employees, the Red Cross needs to expand their list of volunteer blood donors. Therefore, Y-12 is conducting a drive among all employees to obtain prospective donors. All employees are urged to demonstrate their willingness to become Carbide blood donors by completing and signing the form below and returning it to the Benefit Plans Office, Room 143, Building 9704-2.

Since free blood will be available to dependents as well as employees, your spouse also may become a blood donor. Additional forms are available from the Benefit Plans Office upon request.

### BLOOD DONOR AGREEMENT

I agree to my name being placed on the list of volunteer blood donors maintained by the Oak Ridge Chapter of the American Red Cross for the purpose of providing free blood at the Oak Ridge Hospital.

I also agree to report to the Oak Ridge Hospital for the purpose of giving blood when I am called by the Red Cross.

Name \_\_\_\_\_ Age \_\_\_\_\_ Date \_\_\_\_\_  
Blood Type (if known) \_\_\_\_\_ Home Phone \_\_\_\_\_  
Installation \_\_\_\_\_ Plant Phone \_\_\_\_\_  
Home Address \_\_\_\_\_

Return signed form to Y-12 Benefit Plans Office, Room 143, Building 9704-2.

## Veteran Cafeteria Employee Takes Early Retirement; Commuted Half Million Miles

An early retirement for March was omitted from last week's Bulletin, as Irene E. McCroskey, veteran Cafeteria employee leaves for her home in Sweetwater. Mrs. McCroskey probably holds the record for mileage driven to and from work as far as Y-12 is concerned.

For the past 19 years, one month and 15 days, her travel from home to work and return has totaled almost half a million miles! . . . or 488,448 miles. Had she stretched that to the moon, she'd have been there and almost half-way back.

A native of Sweetwater, she lives at Route 3, Sweetwater, with her retired husband. The McCroskeys have three children, Joe, and Margaret Gaines, of Sweetwater, and Beulah M. Lewis, Minden, Louisiana. Three grandchildren also brighten family gatherings.

As a matter of fact, upon her immediate retirement Mrs. McCroskey plans to visit in Louisiana with her daughter and granddaughter. She plans further trips to Michigan and California and a lot of just plain "sitting," she says. Her church work will occupy most of her time. She is a member of the North Point Presbyterian Church.

"Folks in the Cafeteria seem



Irene E. McCroskey

like family to me," she said. "When you get to work with nice people for more than 19 years, you come to love them as your own. I am going to miss every one of them."

The employees in the Cafeteria honored Mrs. McCroskey last Friday, March 29 with coffee and cake, for her long and honorable years of service. "We're glad she didn't take that trip to the moon," one Cafeteria employee said.

## Inspection Plays Vital Role In Determining Rigid Standards, Specifications Of Y-12 Production

Nearly every large industrial production plant has some sort of quality control program, but few plants in the world have as complete a program for determining product quality as Y-12 does. When a Y-12 product is certified as having met design specifications, it has successfully passed a large number of rigorous tests which make up what is known as the product certification program. Product specifications are normally very rigid, and Y-12ers can be proud of the reputation they have built

over the years for doing high quality work. Since, in general, machines cannot adjust themselves or interpret what they see, the men and women involved in product certification work are of far more importance in making the program successful than the precise and expensive equipment they use. Diligence and integrity on their part are necessary at all times to ensure that products shipped from Y-12 are of unquestionable quality and can be used with confidence in America's defense program. This is the first in a series of three articles about the program and its importance to Y-12 and to the nation.

### Three Determining Techniques

The techniques used in determining product quality include dimensional inspection, physical testing, and chemical and isotopic analysis. Dimensional inspection is the subject of this first article. As its name implies, it is primarily concerned with the measurement of dimensions, shapes and surface finishes. Physical testing, which will be the subject of the second article, utilizes several methods for examining products. For example, in nondestructive testing, X-rays are used to locate cavities inside pieces of metal in the same manner as they are used by dentists when they are in a drilling mood. Metallurgical techniques are used in determining physical properties of metals used in production. The work of the laboratory analysts will be discussed in the final article. It is their job to show that our products meet all quality requirements concerning purity and composition.

Production Inspection of the Technical and Production Certification Division, is responsible for dimensional inspection of Y-12 products. Employees in this department use a wide range of tools from relatively simple micrometers to the most up-to-date automatic gages capable of making measurements to an accuracy which is beyond the imagination of the average person. One might think that the job of making dimensional measurements would become easy when such fine equipment is available, but the complex shapes and close tolerances involved require considerable skill on the part of the individuals concerned. Most of the products inspected have 20 or more dimensions to be measured and recorded. Some items require as many as 80 separate measurements. Complete records are required by the Atomic Energy Commission as part of the formal certification that the product

Continued on Page 4

### Yellow Bordered Badge Needs To Be Picked Up

Has Spring Fever prevented you from picking up that new badge? Well, don't let it. The new yellow bordered badges come down from the racks next Wednesday, April 10, at 11 p.m. After that time you'll have to walk up to Badge and Pass to pick up the new quarterly badge . . . that's a long way to walk in this Spring sunshine . . . Yawn.



PIERCE G. FLEEMAN, better known in Inspection as "P. G.," is shown checking a rotary contour gage prior to using it in evaluation of production parts. Fleeman and his associates use this manually operated machine to measure parts having cylindrical cross sections. Through careful operation they are able to detect deviations of a few ten-thousandths of an inch from desired dimensions. Behind Fleeman is the console containing recording equipment and the push-button controls for operating the gage.



OPERATING A PRECISION, TAPE-CONTROLLED MACHINE which stands 10 feet high and weighs several tons is K. C. Burgess. He is in the process of setting up the equipment to perform an inspection. The unit behind Burgess contains a punched tape which transmits instructions to the machine to carry out the inspection once the equipment is set up. The machine table can be moved automatically in two dimensions and is capable of positioning to an accuracy equivalent to one-twentieth of the thickness of a sheet of cellophane paper similar to that found around a pack of cigarettes. Part deviations from the machine position are printed automatically on a sheet of paper.

### Florida Fish Trip Planned By Y-12ers

Y-12ers may be interested in joining a fishing safari for the long Easter holidays down to Panama City, Florida. The fishing expedition is still in the "hatching" stage, and the dates are April 12 through April 15. Any deep-sea angler wishing to join the caravan should contact B Shift Fire and Guardsmen. Their telephone number is 7272, and they would welcome any takers.

### SAFETY SCOREBOARD

The Y-12 Plant Has  
Operated  
25 Days Or  
775,000 Man-Hours  
(Unofficial Estimate)  
Without A Disabling  
Injury  
Through March 31  
Phone 7755  
For Daily Report  
On Accident-Free Hours



# The Bulletin

Published Weekly For The  
Y-12 Employees Of  
UNION CARBIDE  
NUCLEAR COMPANY  
Division of



UNION CARBIDE CORPORATION

JAMES A. YOUNG Editor

Member Appalachian  
Industrial  
Editors' Association

## OFFICE

Post Office Box Y  
Oak Ridge, Tenn.  
Bldg. 9704-2 Room 149  
Telephone 7109

## ORNL's Miller Talk Set By Welding Group

Will Speak On USSR  
Progress In Welding



Edward C. Miller

The Northeast Tennessee Section of the American Welding Society will meet next Tuesday, April 9, at the Holiday Inn. A smorgasbord dinner will begin at 7 p.m., with a social hour scheduled for 6:30.

Edward C. Miller, Superintendent of the Inspection Engineering Department at Oak Ridge National Laboratory, will speak at 8 p.m. on "Welding in the USSR." Miller received a BS in Metallurgical Engineering at the Missouri School of Mines and an MS in Metallurgy from the University of Idaho. He has been associated with Wayne University and Purdue as an assistant and associate professor in Metallurgical Engineering.

Miller has published numerous papers on zirconium, liquid metal corrosion, nuclear reactor safety codes, fabrication of nuclear reactor pressure vessels and piping, welding in the Soviet Union. He belongs to various technical societies and committees on national and international levels. He is a past chairman of the local AWS and has held many national posts in the AWS.

He was a delegate with the American Welding Expert Exchange Delegation which toured Russia last year, and will present factual information concerning the art of welding. Interesting slides and pictures will accompany his lecture.

All AWS members and guests are urged to attend this interesting program. Dinner reservations may be made through any AWS member.

## WATER, WATER EVERYWHERE

To meet the overall needs of a community a water system must supply 150 gallons per person each day. About 60 of these gallons go for drinking, cooking, laundering, household cleaning, bathing, lawn sprinkling, shaving, backyard swimming pools, and car washing. The other 90 gallons per man go for commercial purposes.



The other day we made the mistake of asking a hypochondriac how he felt. Now we know how the little boy felt when he took his finger out of the dike.

Taking a finger out of the pie, it's released in Y-12 various and varied activities of Spring fevered Y-12ers. First off . . . in

## MAINTENANCE

Electrical poops the deck clear with news of V. Lovett walking around like every proud grandpop should. Bryan Thomas Dance arrived March 18 and is the son of Mr. and Mrs. William T. Dance. Grandpa and Grandma Lovett have been caring for big brother and sister . . . and they are expert baby sitters in case you need one sometime.

The March winds blew in some good news for C. R. Sharp. His first grandchild, Denise Lynn Raley, was born March 4 in Peterstown, West Virginia, and she's a living doll. Grandpa Sharp journeyed up to take a peek at the new arrival (he had to get away from all the smoke caused by the cigars he passed around.)

Congratulations to John T. Wray, son of O. B. Wray, who received his degree from the University of Tennessee School of Dentistry in Memphis on March 17. John has been commissioned a first lieutenant in the Army and is now stationed at Ft. Sam Houston, Texas.

Get well wishes go to R. C. Blevins, A. G. Dunham and F. B. Parrott who let the old bug bite them . . . and to Hayes Bass who is recuperating at home after surgery.

Special get well wishes go to Kermit Duncan's father who is confined to the hospital. He is getting along fine . . . but will probably remain in the hospital for some time.

The welcome mat is out for B. S. Denton and W. S. Caruthers who are returned after making the ailing list.

Lisa Gail Duncan is the pretty little baby that's taking up most of Maynard Duncan's time these days, but he doesn't mind. After all, your first grandbaby is entitled to some privileges. Lisa was born February 4 and grandpappy can keep a sharp eye on her since she lives nearby . . . that is, when all the cigar smoke clears away. (Seems like everyone in Electrical is having grandbabies!)

If you ever think you have no friends, just rent a cottage on the beach for the summer.

## CHEMICAL OPERATIONS



Dewitt Clinton Jr.

How about this fine boy? The first grandchild of Mr. and Mrs. Howard M. Burnett (he's in Chemical), 105 Ogontz Lane, Oak Ridge, arrived March 4, 1963. Little Dewitt Clinton Jr. arrived at the Bristol Memorial Hospital. Daughter Doris and her husband are at home at 1114 Windsor Avenue at Bristol . . . all doing nicely.

A. E. Sands, Chemical, reports that after six grandsons (belonging to their two sons), he finally has a granddaughter. Nobody got

the little tyke's name, but she weighed in at seven pounds.

Middle age is that time of life when friends become so stout and bald they can't recognize you!

## MECHANICAL OPERATIONS

That story of Harold Cornell, Production Machining, walking through the glass doors in his Smoky cabin has really got knocked around! First, it was reported that Harold was "drilling cornices" . . . well, it turned out he wasn't at all. Fanning in and out of the A Frame, Harold was "grilling Cornishes" . . . those small game hens so good to eat. (This is a classic example of why editors take to drink!)



Thomas Andrew and Sandra Jean Shelton

The Dukes (Eleanor and Kirby) are mighty proud of their grandtwins, little Thomas Andrew and Sandra Jean Shelton of Johnson City. Proud grandpop Kirby is in the General Machine Shop. The twins really belong to Thomas and Jean Shelton.



Ricky Wheeler

Presenting in this corner Ricky Wheeler, son number two of Tommy and Diane Wheeler, age seven months. His papa is in the Alpha Five Machine Shop. (Tom, what's the formula for keeping 'em smiling all the time like that?)

All the friends of Oscar Morris are pleased to hear that ol' Oscar is getting better and well and will be back among the bunch before too long.

Jim Craig transferred out . . . adieu to him.

Sympathy is extended to R. H. Jenkins, Assembly and Welding in Beta Four. His mother died recently in Greeneville, Tennessee.

The A-2 Shop extends sympathy to J. H. Turner whose father-in-law died in Cincinnati recently.

Going and coming they are in A-2 Shop . . . new hires include J. H. Powers, N. Adams, W. G. Russell, R. L. Bedwell, D. W. Burchfield and G. D. Reynolds . . . all very welcome too! Goers include W. R. Burrell and J. F. Fernandez who transferred to other departments.

Jesse Johnston took a week's



## BOGGS-BORING

The engagement of Miss Joan Elizabeth Boggs, daughter of Mr. and Mrs. Thomas Lewis Boggs, Route 3, Clinton, is announced by her parents. The groom-to-be is Mr. James Eugene Boring, son of Mr. and Mrs. P. P. Boring, Crooksville, Ohio. The daughter's father is in Y-12's Building, Grounds and Maintenance Shops.

Miss Boggs attended Texas Woman's University, and graduated from the University of Tennessee with a BS degree in home economics. She is currently employed by the Crooksville Board of Education as a home economics instructor. She is a member of the Business and Professional Women's Club, the American Home Economics Association, the American Vocational Association. While in Oak Ridge she was a member at Kern Methodist Church, where she sang with the Oak Ridge Chorus.

The future groom is a graduate of Ohio University. He is an assistant treasurer of the Nelson McCoy Pottery Company, Roseville, Ohio, a member of the Crooksville Jaycees, the Masonic Lodge, the American Legion, and the First Methodist Church.

The wedding will take place at 4:30 p.m., Saturday, June 15, at the First Methodist Church, Crooksville.

## B Shifters Will Fish At Blue Springs Thursday

The warm Spring sunshine has brought the fishermen out. B Shifters will be out en masse tomorrow, April 4 at Blue Springs Dock, as their Rodeo gets underway at 12:01 a.m. and stretches into 4 p.m. of that day. Any Y-12er able to make it to the lake tomorrow will be welcomed at the event.

vacation and said he had a wonderful time just staying home doing nothing.

## ENGINEERING

Tool Engineering welcomes back T. R. Chilcoat and H. L. Stamey who have been with Tool Control . . . M. B. Biddex and H. W. Schrader are taking their place.

New cars are busting out all over the premises as Carl St. Onge, Joe Howell, Bill Rogers, Dick Green, Elmer Neeley, and several other anonymous folks are sporting new buggies.

## TECHNICAL

Radiation Safety Department sends congratulations to the wife of Art Stewart upon her recent election as vice president of the Tennessee National Guard Auxiliary . . . Also a big welcome to William W. Moschler, recently piped aboard.

Another thing that  
Makes us blue . . .  
A get-well card  
With postage due!

## FINANCE AND MATERIALS

Timekeeping has Ira Shotts well over his anxiety. He's all beaming with smiles these days. His mare recently presented him with a prize colt . . . which has been named "Big Daddy."

"Spring has finally sprung" and the warm sunny days last week were just what Georgia Rader, Microreproduction and Engineering Services, had ordered. Out came the fishing gear and away went Georgia.

Cashier and Travel's Wanda Hawn is feeling better now that her father is on the mend. Mr. Simmons checked into Oak Ridge Hospital for surgery and is recovering nicely now.



Miss Joan Elizabeth Boggs



Mr. and Mrs. Jack R. Harrell

## HARRELL-FOX

The wedding of Katherine Fox and Jack R. Harrell was solemnized Friday, March 8, at the home of the bride's parents, Mr. and Mrs. Delbert P. Flatford, 1100 Baker Avenue, Knoxville. The groom is the son of Mr. and Mrs. Albert E. Harrell, 6914 Terry Drive, Knoxville.

Mr. Harrell is in Y-12's Production Machining, Beta Four, and is a veteran of the United States Army.

After a wedding trip to Florida, the couple is at home on Gilbert Lane, Knoxville.



Congratulations to the following Y-12ers who will celebrate anniversaries with Carbide within the next few days.

## 15 YEARS

Ben L. Hammer, Process Engineering, April 9.

## 10 YEARS

Conie F. Jenkins, Building, Grounds and Maintenance Shops, April 6.

Stanley F. Groothuis, Instrument Engineering, April 6.

Maggie K. Martin, Janitor's Department, April 8.

Samuel R. Messamore, Area Five Maintenance, April 8.

Charles H. Helton, Production Machining, April 8.

## IS THE HOUSE LOCKED?

The idea of putting a lock on your back door is barely 200 years old, maybe a bit less. The way your front door is locked was first used by the Egyptians around 2000 B.C.!



# Y-12ers Take Fair Share Of Trophies

## All-Carbine Alley Tilt Now History

Trophy-wise, Y-12ers took their fair share of honors in the All Carbine Bowling Tournament, finished this past week-end. In the men's division, the XY's took high team honors in the scratch division with a score of 2792. (Y-12 Champ Don Branson is a member of this Y-12, ORNL team).

Handicap honors went to the City Slickers, from ORGDP, with a combined score of 3056. Len Hart, Y-12, and C. W. Castle, ORGDP, took double highs with 1232. Y-12ers J. V. Haggard and J. F. May took handicap doubles with 1309.

In singles it was Y-12ers again... as Clyde Smith captured scratch tops with a 630. Jim Grubb was handicap champ in singles with a 686.

### Branson Wins Again

The All Events scratch leader was Don Branson, repeating his victory in the Y-12 Tournament, who rolled a 1770. All Events handicap laurels went to M. J. Gibson, ORGDP, with a 1901.

Y-12 females also took their share of honors as the Echos posted a 2240 team scratch score. (This team is comprised of Ann Rackley, Joyce Gillihan, Irene Carmack, Peggy Hardin and Ruby O'Kain.) The Goofers, ORNL, took handicap team highs with 2951.

Mary Lou Bailey, ORNL, and Ruby O'Kain, Y-12, had high doubles in scratch with 994. Singles honors went to Jean Soard, ORNL, with 548.

### Here Comes O'Kain

Y-12er Peggy Hardin, in her usual fine style, took handicap singles with a 633. All Events Scratch honors went to Ruby O'Kain with 1498. Thus, Ruby lays claim to the women's bowling throne in Oak Ridge. She took city honors, Y-12 tops, and now, all Carbine tops. (It looks like nobody can stop her on the alleys... not this year anyway.)

Irene Carmack, another fine Y-12 sportswoman, took all events handicap with a resounding 1821.

# Cool Cats Keep Mixed Bowling Top

## Irene Carmack Sweeps Women's High Scores

League leaders in the Mixed League for Y-12 bowlers, the Cool Cats, took a four point advantage last week by downing the Scrappers for the full count. The Phantoms also took four from the Pin Plasters. Three point wins were registered by the Alley Cats over the Ghosts, and the Goofers over the Toppers.

Irene Carmack, Cool Cats, swept women's honors by rolling a 188 scratch single game, a 236 handicap single. In series she had 492 scratch and 636 handicap. W. B. Stephens, Goofers, took men's honors in singles with a 205 scratch, 224 handicap game. Bob Hagood, Alley Cats, rolled high series scratch with 551, and J. Markland, Cool Cats, had high handicap series of 620.

The Cool Cats topped team honors all the way, rolling 647 scratch, 803 handicap singles; 1913 scratch and 2381 handicap series.

League standings follow:

Team	W	L
Cool Cats	33	15
Ghosts	29	19
Alley Cats	27½	20½
Goofers	26	22
Pin Plasters	22½	25½
Scrappers	21	27
Phantoms	20	28
Toppers	13	35

# Spurling Hi Powered Rifle In 2nd Shoot

The All Carbine High Power Rifle League held its second match of league firing Saturday, March 23. Y-12er R. J. Spurling won everything in sight in this match, taking the high overall with a score of 294-16v.

Jack also took highs in stand posting a 96-4v and in sitting rapid fire with a score of 99-5v. C. G. Brewster, held high in prone rapid firing with a 99-9v total top in the field, to beat Spurling from the completely clean sweep.

SCRATCH SCORES

R. J. Spurling, Y-12	294-16v
W. H. Kelley Jr., ORNL	287-6v
C. G. Brewster, Y-12	285-14v
Joe Weidley, ORNL	274-7v
Bert Searles, Y-12	259-5v
A. S. Quist, ORNL	254-5v
G. B. Marrow, ORNL	225-0v

HANDICAP SCORES

W. H. Kelley Jr., ORNL	289.417
C. G. Brewster, Y-12	289.104
A. S. Quist, ORNL	286.494
G. B. Marrow, ORNL	285.503
Bert Searles, Y-12	283.752

The next scheduled shoot is set for Saturday, April 13, at 1 p.m. at the Oak Ridge Sportsman's Association high power rifle range.

# Rippers In Classic Lead By Thin Line

## Final Night Could Spell The Difference

With only one more night of bowling in the Classic League for Y-12ers the word is that somebody has got to stop the Rippers. They moved into first place again by ripping four points from the hides of the All Stars, and stand three and one-half points in first berth standings. The only other four point grasp saw the Wasps sting the Tigers. Two three and one-half points were twisted by the Smelters from the Wolves and the Screwballs from the Bumpers. The Rebels romped over the Sportsmen by three, as did the Markers over the Swingsters, and the Eightballs over the Cubs. The Has Beens and Playboys shared two points each.

Tudor Boyd, Markers, had high singles with a 245 scratch, 269 handicap. Jack Spears, Rebels, rolled high series with 595, and S. G. "Red" Albright took high series in handicap totals with 680.

The Has Beens were big team-wise with 936 scratch, and 1077 handicap singles. The Rippers took scratch series with 2591, and the Markers' 2948 was high in series handicap.

League standings follow:

Team	W	L
Rippers	42½	13½
All Stars	39	17
Has Beens	35	21
Swingsters	34	22
Rebels	33	23
Wasps	33	23
Bumpers	31½	24½
Markers	27	29
Sportsmen	26	30
Playboys	26	30
Smelters	24½	31½
Wolves	23½	32½
Screwballs	22½	33½
Tigers	20½	35½
Eightballs	17	39
Cubs	13	43

# Electrical Is Planning Easter Holiday Rodeo

Everybody is getting in on the fishing act, including folks down in Electrical. Electrical folks plan their big contest for next Thursday, April 11, beginning at 6 p.m., extending through Saturday, at 6 p.m.

Any Y-12er on holiday that might feel lucky with the old fishing pole might come out. Just get in touch with Ed Cook, Electrical, for details on the details. The event will take place at Pelissippi Lodge, on Norris Lake, where predictions are "clearing and full." Let's go fishing!



HAIL TO THE CHAMPS! Many Y-12ers gathered last week to greet the new Tennessee State Champions... the Oak Ridge Wildcats. In the middle of the group is seen the big trophy brought back by the 'Cats. From left are Kenny Campbell, Bill Atkisson, Bill Ramsey, Bud Defenderfer, Coach Ira Green, Chuck Tate, Mike Stevens, Billy Anderson, and Charles Tye. The squad was honored at a banquet attended by nearly 300 people, where the film of the big finals from Nashville was shown. Proud Y-12 papas were evident throughout the happy events. Not pictured were Edwin Connelly and Bob Cantrell.

# ORNL Still Leads Rifle League Set

The ninth shoot-out in the 22 Calibre Rifle League for Carbid-ers last week saw the Y-12 team take four points, ORNL six and the Independent riflemen take two. Scratch team firing saw Y-12 fire 1414; ORNL, 1427; and Independent, 1404. Handicap scores were: Y-12: 1446.282; ORNL, 1453.641; Independent: 1442.291.

Y-12 high men were, in the scratch firing, Bob Powers with 228, Art Hensley with 286, and Bert Searles and Dave DeWalt with 283 each. Handicap tops were G. W. Holcombe with 291-360, Bob Powers with 289.510 and Art Hensley with 289.254.

League standings follow:

Team	Points
ORNL	42
Y-12	33
Independent	21

# Big Five Take 1st Slot In C League

## See-Saw Competition Changes Lead Again

The Big Five assumed the reins in the C League for Y-12 bowlers last week with a hair-line one point lead. They took the Rodders for three points, while the Hi Lifers also won by three over the Screwballs. The Sunflowers dropped three to C Shift edging away from first place. The Rounders took three from the Par Busters, the Strikers took the Lucky Strikes by the same score and the SP's sank the Hookers for three.

Arnold Tiller, Rounders, almost swept the board, rolling a 225 single scratch, series scores of 612 scratch and 654 handicap. Bob Levline, SP's, had a high single handicap of 245. The Rounders had high scratch games with scores of 896 singles and 2555 series. The SP's captured high handicaps in line of 1007 single and 2886 series.

League standings follow:

Team	W	L
Big Five	32	16
Hi Lifers	31	17
Sunflowers	30	18
Par Busters	28	20
Lucky Strikes	27	21
Rounders	27	21
Strikers	27	21
Rodders	19	29
Hookers	18	30
Screwballs	18	30
SP's	16	32
C Shift	15	33

No matter what other nations might say about us, immigration is still the sincerest form of flattery!

# Bush Rolls Off For League Champ

## Dry Hides Tangle With Top Reagents

The big roll-off in the Bush League for Y-12 bowlers took place Monday, April 1... as the Dry Hides, winner of the second half, took on the first-half winners, the Reagents.

The Dry Hides rocked comfortably last week in the last lap by taking a bye. The Reagents won three from the Beavers, the Rollmasters rolled over the Rusty Five, the Lucky Five fixed the Seven Sixties, and the Rollniks rolled over the Hi Balls, all by the same score.

J. W. Halsey, Rusty Five, rolled the high scratch game of the night with 215. Tom Hudson, Lucky Five, took the rest of the board with a 248 single handicap, series games of 546 scratch and 651 handicap.

The Lucky Five took singles with 840 scratch, 1036 handicap. They also had high series handicap games with 2949. The Rollmasters slipped in with high series in scratch play with 2384.

Final league standings follow:

Team	W	L
Dry Hides	46	18
Reagents	36	28
Rusty Five	35	29
Hi Balls	34	30
Rollmasters	32½	31½
Lucky Five	29	35
Beavers	27	37
Rollniks	25	39
Seven Sixties	32½	40½

### ADEQUATE FOOD SUPPLY

Food is adequate in 30 industrialized nations in the temperate Northern area, where 900 million people live. But in 70 other less developed countries, malnutrition is widespread and persistent, and there is no likelihood that the food problems soon will be solved.



THE BIG 1964 Captain for the Wildcats, announced at the March 25 banquet honoring the Oak Ridge Wildcats, is Chuck Tate, son of Charles H. Tate, Jr., Process Analysis. The senior-to-be saw action throughout the entire season as the Oak Ridge team finished a season with only four losses in regular season play... none of which, of course, occurred in tournament play.

# 4-Squares Are Five Points In E Bowling Lead

The Foursquares stretched their lead in the E Bowling League last week by downing the Pintwisters by the full count. Also picking up four points, the Ten Pins blasted the Cannonballs. The only three point win featured the Alleybees over the Pinquins.

Grady Norton, Ten Pins, almost swept the board with individual honors, taking singles with 196 scratch and 236 handicap. His series handicap score was 639. Nolan Parrott, Ten Pins, took the scratch series with total of 532.

The Alleybees almost swept team boards too with singles of 682 scratch and 839 handicap. Their scratch series was 1863, but the Foursquares had a higher handicap series with 2339.

League standings follow:

Team	W	L
Foursquares	33	19
Pinquins	28	24
Alleybees	26	26
Ten Pins	26	26
Cannonballs	22	30
Pintwisters	21	31

# Porcelain Enamel Is Long-Time Metal Finish

One of the finest metal finishes known to man is also one of the oldest. Recently, a 2,000 year old Celtic shield was dredged from the Thames River with its porcelain enamel face as lustrous as ever. Today, some porcelain enamel coated parts of today's jet engines withstand raging temperatures over 2,000 degrees F.



BULK RATE  
U. S. Postage  
**PAID**  
Oak Ridge, Tenn.  
Permit No. 71

**UNION CARBIDE  
NUCLEAR COMPANY**  
Division of  
**Union Carbide Corporation**  
Post Office Box Y  
Oak Ridge, Tennessee

RETURN POSTAGE GUARANTEED

POSTMASTER: DO NOT FORWARD. IF ADDRESSEE HAS MOVED,  
RETURN TO SENDER IMMEDIATELY.

## ASME Sets Dinner Meeting Next Week

### Space Communications Is April Meet Topic

The Oak Ridge subsection of the American Society of Mechanical Engineers will meet next Thursday, April 11, at the Elks Lodge on Arkansas Avenue, Oak Ridge.

John D. Howard Jr., General Transmission and Outside Plant Engineer for the State of Tennessee will speak on "Space Communications." Howard is a native of Birmingham, Alabama, and received his education at the University of Louisville. He has been very active in the AIEE, having served as program chairman in New York and Atlanta Sections as well as Nashville. He is past chairman of the AIEE, Nashville section.

Dinner will begin promptly at 7 p.m. next Thursday and the technical session will get underway at 8 p.m. Dinner for members and guests will cost \$2.50 and reservations may be made by calling Buford Garrett, extension 7-8711.

All members and guests are urged to attend.

### Good Reason For Culture To Move Toward West

"For the great non-Western majority of the human race, being modern, scientific and democratic are . . . so many ways of going Western without knowing it. But why . . . go Western? What is the attraction of the Western way of life? The answer is . . . in the four words of a



John D. Howard Jr.

### Lo, Mistakes Come Easy To The Poor Editor . . .

Pity the poor editor. In an effort to keep mistakes from a paper, many an editor has been put away. It's surprising how easy an error can be made, too. Take, for instance Shakespeare's expression: "To be or not to be . . ." alone. There is a possible 2,758,009 errors in the six word phrase, just by transposition alone. This doesn't include misspelled words, punctuation errors, factual errors, etc., etc. Help!

#### COLLEGE OF KNOWLEDGE

A nearby town, with its university, claims to be a veritable fountain of knowledge . . . claims that students come from all over to drink there!

proverb: "Nothing succeeds like success." . . . Arnold J. Toynbee.

6-11458



**FAREWELL PARTIES HONORING** retiring Y-12ers were held last week as fellow employees gathered to send off veteran employees. In the top photograph John A. Coston receives a large parcel from Garage employees. Mr. Coston left March 29, on early retirement, after 15 years company service in Y-12. In the lower photograph, Archie D. Douglass, Area Five Maintenance, is honored by his co-workers. They presented him with yard equipment to make sure that his retirement is not completely one of relaxation. Mr. Douglass came to Y-12 December 19, 1944, and served more than 18 years in the plant.



Ride wanted or will join car pool from Cedar Bluffs sub-division, Kingston Pike Section, to West Portal, straight. C. M. Wall, plant phone 7-8965, home phone Knoxville 584-1214.

Car pool member wanted from West Hills, Knoxville, to East Portal, straight day. J. F. Witt, plant phone 7-8285, home phone 588-2015.

Two riders needed from Harri-man to West or Bear Creek Portal, straight day. R. W. Curtis, plant phone 7-8465, home phone Harri-man 882-9291.

Ride wanted from vicinity of Montana Road, Oak Ridge, to North Portal, straight day. Anthony Hitchcock, plant phone 7-8059, home phone Oak Ridge 483-1600.

Ride wanted, or will join car pool from vicinity of Fountain City at Fair Drive to Bear Creek Portal, H Shift. H. C. Day, plant phone 7246, home phone Knoxville 689-4934.

Ride wanted from Lenoir City to Central Portal, straight day. Joyce Williamson, plant phone 7-8368, home phone Lenoir City 7-8394.

### Photo Art Shown At Art Center

The final show of the year will open Sunday, April 7, for the Oak Ridge Art Center. From 3 until 6 p.m., the photographs of Steven Trefonides will be exhibited.

The photographs of the internationally acclaimed painter-photographer have been purchased by the Museum of Modern Art and the Metropolitan Museum of New York. He is also represented in the Los Angeles and Chicago museums among others, and has exhibited at both American and European galleries, including the Institute of Contemporary Art, the De Cordova Dana Museum, the Carl Siemab Gallery, Milan Triennale, and Venice's Barozzi Gallery.

The artist has studied abroad on a Tiffany Scholarship Award and a Fulbright Travel Award.

The current show will feature pictures taken during his stay in India. The Calcutta Statesman called them "first-rate," showing the camera-man's freshness of insight and delight in the fascination of life and the pursuits of the ordinary people of India.

The Trefonides exhibit will continue through April 21, with showings every Sunday from 3 until 6. Non-members will be charged a nominal admission fee.

### Volunteers Volunteer From Volunteer State

The nickname, the Volunteer State, was given Tennessee when President James Polk asked for 2,800 volunteers from his home state during the Mexican War, and 30,000 men responded. Tennessee furnished more soldiers than any other state during the Civil War, counting those who fought on both sides. Many East Tennesseans remained loyal to the Union. According to unreliable records Anderson County furnished only two soldiers to the Rebel cause, with hundreds slipping away to join the Union Army.

### Joys (?) Of Baldness

At least there is some consolation in becoming bald. Dr. T. A. Lincoln, Oak Ridge National Laboratory Medical Director, stated in a recent article: "If loss of hair is indeed an evolutionary process, we bald men can claim that we are in the forefront of an inevitable change which will eventually affect most men."

Some consolation!



**OTHER INSTRUMENTS IN USE IN PRODUCTION INSPECTION** are shown as J. D. Shelton demonstrates their use. To the left is a height gage reading in increments of one ten-thousandth of an inch and a height reference calibrated in the same units. A small micrometer lies on the table. Shelton is manipulating a squareness gage capable of determining the perpendicularity of two surfaces within three ten-thousandths of a degree of arc. Resting against the granite master block is a device for measuring angles. On the right is a profile meter used to determine the roughness of a finished surface in millionths of an inch.



**YOU HAVE HEARD OF** "splitting hairs." William H. Renfro demonstrates how inspection personnel must be able to do better than that in measuring out-of-roundness. By careful operation they can detect deviations as small as one-millionth of an inch (one two-thousandths of the thickness of a hair!) Renfro is interpreting data which he obtained during inspection of a pin gage.

### Inspection Plays Vital Role

**Continued from Page 1**  
meets specifications. These records are prepared as the measurements are taken and must be of the highest clerical accuracy. All such records are subject to audit.

**Equipment Illustrated**  
In photographs accompanying this article several Production Inspection employees are shown with some of the equipment used.

Production and inspection problems have become increasingly complex throughout the country as technological advances have been made. Y-12ers can be proud of their contributions toward the solution of these problems in their field. It is only through the careful and productive work of its people that any organization develops an enviable reputation. The people presented here are typical of the many who have helped build that kind of reputation for Production Inspection.

### Instrument Society Meets Tonight In Oak Ridge

The Oak Ridge Section of the Instrument Society of America will meet tonight, Wednesday, April 3 at the Ridge Recreation Hall, Oak Ridge. The meeting will begin at 8 p.m.

A. H. Fowler will discuss "The Engineering Uses of Computers." The engineering application of digital computers and specific problems encountered will be the focus of the address. Special emphasis will be placed on the preparation of flow sheets for the



**EQUIPMENT USED FOR** dimensional inspection must be checked often to insure that its accuracy is maintained. In other words, the gages as well as the products must be of certified quality. John W. Anthony is shown performing a routine dimensional inspection of a gaging component which is used in evaluating Y-12 products. This inspection is being made with a high precision measuring machine often used by Anthony and Inspection personnel in "keeping the gages honest." Measurements of this nature are conducted inside a special room where the temperature is controlled to 0.1° F in order to eliminate errors caused by thermal expansion of metals.

programming of the Fortran and APT systems.

Members and guests are cordially invited to the ISA meeting.

#### ANCIENT FABULIST

Aesop, Greek fable-teller, was born approximately 620 B.C. His moral tales have been repeated to school children for centuries.

6-11452